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SMITHSONIAN INSTITUTION

1962 BUDGET

JUSTIFICATION

Submitted to House of Representatives

January, 1961

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SENATE APPROPRIATIONS COMMITTEE

Interior Subcommittee

DEMOCRATS

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Alan Bible - Nevada

Robert C. Byrd - West Virginia

Dennis Chavez - New Mexico

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Karl E. Mundt - South Dakota

Milton R. Young - Rorth Dakota

SMITHSONIAN INSTITUTION FISCAL YEAR 1962 BUDGET ESTIMATES SUBMITTED TO THE HOUSE OF REPRESENTATIVES January 19, 1961

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SMITHSONIAN INSTITUTION

FISCAL YEAR 1962 BUDGET ESTIMATES

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SMITHSONIAN INSTITUTION

SALARIES AND EXPENSES

General Statement

The Smithsonian Institution was established August 10, 1846, (20 U.S.C. 41) by the Congress "for the increase and diffusion of knowledge among men."

The Smithsonian Institution operates two museums, the United States National Museum, and the National Air Museum; two scientific bureaus, the Bureau of American Ethnology and the Astrophysical Observatory, in addition to research activities of the National Museum; two art galleries, the Freer Gallery of Art and the National Collection of Fine Arts; the Canal Zone Biological Area; and the International Exchange Service. It is responsible for the operation and maintenance of five main exhibition buildings, the Natural History Building, the Arts and Industries Building, the Smithsonian Building, the Aircraft Building, and the Freer Gallery of Art; a storage facility; and an exhibits laboratory.

To achieve its broad objectives, the Institution maintains public exhibits representative of the arts, American history, aeronautics, anthropology, geology, technology, and zoology; preserves for reference and study millions of valuable items of scientific, cultural, and historical interest; conducts fundamental research and publishes the results of these investigations; and participates in the international exchange of scientific literature.

The impact on the visiting public of the Smithsonian Institution's extensive rehabilitation of buildings and modernization of museum exhibits programs is reflected by the increase in the number of visitors. In

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fiscal year 1960 there were 6,494,630 visitors to the Smithsonian buildings, excluding the National Gallery of Art and the National Zoological Park. The increase of 143,228 over fiscal year 1959 would have been substantially greater had the Aircraft Building not been closed for renovation for approxi-The Institution's renovation of exhibits program was mately 8 months. initiated in fiscal year 1954 and since then eighteen new, vital, and effective renovated halls have been opened to the public. What the Smithsonian now presents to its visitors has new attractiveness and new educational significance. These exhibits present the material in such a logically clear and interesting manner that the visitor stops and reads the explanatory labels. In this way the Smithsonian exhibits improve the visitor's basic understanding of the natural history of America and of the world, of history of many of the most important human arts and sciences, and of the agriculture and technology that has made modern America what it is.

In its museum halls, human history -- of our environment, our ideas, our technical achievements, our institutions, our manners and customs, our daily lives -- is presented meaningfully to the citizen of tomorrow as well as of today. The Smithsonian Institution's objectives are to contribute to raising the general level of cultural appreciation, to educate in the broadest sense, and to encourage people to seek knowledge of the highest order. Through the museums, art galleries, research laboratories, and explorations, the Institution seeks not only to preserve and document the full range of our history but also to interpret it to the public.

The Institution embraces the world's largest museum complex with over 50 million cataloged objects. Many of these collections are used by

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From the beginning, indeed, those charged with the management of the Smithsonian have thought of it as a center of scientific research. The Smithsonian was 7 RK probably the first organization on this continent to have a full time staff of diversified scientific workers. One index of the productivity of this research organization is found in the more than 7,500 specialized volumes and monographs that the Institution has authored and distributed to the learned The Smithsonian Institution has become one of the world's centers for world. the scientific study of the geology of the earth's crust, the botany of its plants, the zoology of its animals, and the anthropology of its human beings. In such other fields as astrophysics, physiology of living plants, and tropical biology, it maintains notable research programs. Among the scientific organizations that have been established with the assistance of the Smithsonian are the National Academy of Sciences, the American Association for the Advancement of Science, the Weather Bureau, the Lighthouse Service, the Geological Survey, the National Research Council, the Carnegie Institution of Washington, the National Advisory Committee for Aeronautics, the Research Corporation and others. The Smithsonian Institution is the official United States agency for the exchange with other nations of governmental, scientific, and literary publications. The International Exchange Service, initiated more than a century ago by the Smithsonian Institution for the interchange of scientific

publications between learned societies and individuals in the United States

and those of foreign countries, serves as a means of developing and executing

in part the broad and comprehensive objective, "the diffusion of knowledge."

scientists and technologists in connection with important research programs.



It was later designated by the United States Government as the agency for the transmission of official documents to selected depositories throughout the world, and it continues to execute the exchanges pursuant to conventions, treaties, and other international agreements.

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SMITHSONIAN INSTITUTION

SALARIES AND EXPENSES

Explanation and Justification of Change in Appropriation Language

The proposed change in language deletes the work conductors and inserts the word operators to permit the substitution of current job description titles for those used previously. This is merely a technical change and will not result in any additional cost to the appropriation.

In accordance with the "Federal Employees Uniform Allowance Act," the phrase and uniforms or allowances therefor, as authorized by law (5 U.S.C. 2131), for other employees has been included to authorize the furnishing of a uniform or the payment of a uniform allowance to employees who are required by regulation or law to wear a prescribed uniform in the performance of their official duties.

This change incle allow the Institute to purchase uniforms for rest some attendants. Mine attendants in mine attendants and two uniforms each at an average each of 415 per minforms. The total annual cost for all employees in 4270:

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SMITHSONIAN INSTITUTION

SALARIES AND EXPENSES

Lead-off Tabular Statement

	Appr	\$7,768,000					
	Prop	328,000 1/					
	Base	Base for 1962					
	Budg	Budget Estimate, 1962					
	Incr	ease, 1962	1,179,000				
		Summary of Increases and Decreases, 1962					
1	(1) 8	To provide staff for the preparation and progressive installation of exhibits in the Museum of History and Technology and for partial operation of the new building	\$ +681,000				
		Nonrecurring costs of special exhibition equipment in the Museum of History and Technology	-146,000				
, 4	(2)	To provide for additional scientific research, primarily in the fields of astrophysics and natural sciences	+239,000 /				
	(3)	To provide for necessary repairs and rehabilitation of Smithsonian buildings, primarily the Freer Gallery of Art and the storage facility	+227,000				
		Completion of F.Y. 1961 rehabilitation projects	- 58,000				
	(4) 5	To provide for moving and storing of Museum materials to facilitate the reconstruction work and installation of air conditioning in the Natural History Building	+ 80,000				
	(5)	To provide for within-grade promotions	+ 70,000				
P. N	<mark>(</mark> 6)	To provide for a net increase, primarily for personnel benefits and miscellaneous staff increases	+ 86,000				
•		Net increase	1,179,000				
		1/ Excludes \$18,000 supplemental requested for wage rate increase effective December 25, 1960.	162900				

6

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inventorying and tagging the collections
for more by recording collections
out of old building and into new,
by checking and listing locations
in new building and by
correcting locations of objects on
catalog cards of reference collections!
Hill continue about 3 years

Justification

(1) A net increase of \$535,000 to provide staff for the preparation and progressive installation of exhibits in the Museum of History and Technology and for partial operation of the new building.

Need for increase:

The Museum of History and Technology is scheduled to be completed in March 1962. Preparation and installation of exhibits in the building prior to its completion and providing for the part-year operation of the building will result in the following increased workload:

- (a) The Museum of History and Technology staff will plan and participate in the design, construction, and installation of exhibits for the new building; plan and prepare for the move of the staff and collections to the building; and move a part of the Museum's activities to the building from various locations.
- (b) The Buildings Management Service will provide such services as cleaning exhibit and installation areas, laboratories, and offices; moving, loading, unloading, and placing operations; servicing and operating refrigeration, heating, temperature, and humidity control systems and related machinery, accessories, and controls; assisting the exhibits staff in assembly and installation of exhibit cases, displays, special lighting, and equipment; performing minor repairs, refinishing, and touch-up painting incident to the installation of exhibits; assembling, installing, and servicing laboratory, shop and special storage equipment.
- (c) The increased activity in the Museum of History and Technology will also add to the volume of work in the Personnel, Fiscal, Supply and

ISA pays out \$56,000 for rent for 244h St. He pay \$ 29,217 for rental at Cambridge.

1 &5-12 Personnel 1 &8-9 Fried 1961-81 2 &5-4 Supply 1 &8-4 Photo Services 1 &8-3 " 1 &8-4 Library 2 (Japan of # 1785-1 poor, applied)

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Photographic Services Divisions and the working reference Library of the Institution.

Plan of work:

The increase will be used to employ added staff and to purchase additional supplies and materials as follows:

- (a) To employ 14 curators, 20 sub-professional and clerical employees, and 14 exhibits workers in the Museum of History and

 Technology (50 hall) in an (50 ha

*

(2) An increase of \$239,000 to provide for additional scientific research by (a) establishing an analytical laboratory and augmenting the research staff of the Museum of Natural History; (b) enabling the Bureau of American Ethnology to resume work in Middle America; and (c) performing vital scientific research at the Astrophysical Observatory.

Need for increase:

Virtually no increase in the appropriation for research programs has been sought in recent years. In keeping with the Institution's historical role as a research center, however, and in recognition of the great significance of American research today, highly selective areas of the Institution's research program have been studied and are now submitted as requiring strengthening in order that the Institution may continue to contribute its share to the scientific research of the Nation.

(a) The United States National Museum requires an analytical laboratory for developing information as the basis of descriptions and interpretations of objects; for determining the need and specific measures for preservation; and for determining the authenticity and age of objects.

The number of uncataloged specimens in the Department of Zoology has increased to 445,000 and the present staff can catalog only 40% of the specimens accessioned each year.

Work of preparing, cataloging and distributing the foraminifera (small one-celled sea animals with hard shells) is not being completed by the Department of Geology because of inadequate staff.

(b) The Bureau of American Ethnology urgently needs a professional ethnologist to conduct investigations in Mexico and the adjacent areas in



Chiapas, British Honduras, and Guatemala. These investigations pertain to the habits, customs, and mode of life of the peoples living there. There is a strong interest in America in this important field as evidenced by the many requests for information from government organizations, research students and others. The Bureau has an exceptional opportunity to contribute important and useful knowledge about these people.

(c) The research program of the Astrophysical Observatory is broad and diversified and includes solar radiation, solar astrophysics, the upper atmosphere, meteors, meteorites, artificial satellites, and some problems of space science. The small staff of employees paid from the Salaries and Expenses appropriation requires technical assistance and funds for scientific equipment and instrumentation in order to implement a satisfactory Astrophysical Research program. Specifically, additional scientists are needed to design specialized equipment and conduct field testing; detect stellar and solar radiation image registration other than photographic; direct research on an ultraviolet survey of the sky and spectroscopic studies of selected celestial objects; develop a program of electronic image conversion whereby artificial earth satellites may be tracked by photoelectric methods; conduct research on meteorites with electron probe analyses and make mineralogical analyses; analyze meteorites for stable isotopes; assist with the meteorite program by predicting the location of falls by precision tracking methods; and study techniques for focusing X-rays.

The Institution needs a radio carbon laboratory for dating specimens.

Such a laboratory would reduce materially the present backlog of samples held by various Smithsonian Institution scientists which cannot be dated because

2 & 8-14 1 & 8-13 3 & 8-12 2 & 8-11 2 & 8-9 1 & 8-5

the Institution must depend on contributed service from outside laboratories. The Institution would then exercise control over the samples to be dated and would establish its own priorities. It would be able to complete its interpretations and reconstructions rather than depend on other laboratories to announce dates arising basically from the labors of Smithsonian scientists. Plan of work:

The increase will be used to strengthen the research program of the Smithsonian Institution. The \$239,000 would be utilized as follows:

- (a) To employ an analytical chemist and a clerk-typist as the initial staff of an analytical laboratory, and two systematic zoologists and a museum aid for the Museum of Natural History
- (b) To employ an ethnologist and a clerk-stenographer in the Bureau of American Ethnology to resume work in Middle America \$ 12,000
- (c) To employ 3 engineers, 2 physicists, a spectroscopist, an astronomer or theoretical astrophysicist, a mass spectrometerist, a field meteoriticist, and 2 clerical assistants to perform essential research at the Astrophysical Observatory; purchase necessary supplies and equipment (\$52,000) including a spectroscope, experimental electronic equipment, X-ray sources, and detectors; and provide for the fabrication of specialized scientific and technological equipment \$150,000
- (d) To employ a radiochemist and an electronics technician and purchase necessary supplies and equipment for a radio carbon laboratory under the Division of Radiation and Organisms \$ 43,000



(3) A net increase of \$169,000 to provide for necessary repairs and rehabilitation of the (a) Freer Gallery of Art, (b) Smithsonian Institution Storage Facility and (c) Arts and Industries Building.

A description and justification of the projects proposed for completion in fiscal year 1962 follows:

(a) Freer Gallery of Art (1922)

Need for increase:

It is necessary to replace the roof covering and make revisions to the electric distribution systems.

The existing roof covering has so many blistered, cracked, and loosened areas that it requires constant attention. Despite continuous repairs, numerous leaks occur which damage finished interior surfaces of the Gallery and present a hazard to the very valuable objects in the collections housed in the building.

Except on very bright days, the illumination furnished by natural light coming through the Freer skylights and laylights is inadequate and varied making it most difficult to get a proper view of the valuable objects and collections.

(b) Smithsonian Institution Storage Facility (1952)

It will be necessary to repair and paint the exterior metal covering of the temporary storage and restoration shop buildings and to install adequate alarm and fire-fighting systems.

The repainting of these buildings will retard deterioration, extend the useful life of the metal covering, avoid costly future repairs, and provide continued economical, weather-tight storage for museum objects and equipment.



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Existing equipment for fire-fighting consists of portable type fire extinguishers which are of value only for small fires but are inadequate for total protection. Adequate fire-fighting facilities are necessary because of the large volume of valuable and irreplaceable aircraft, engines, aeronautical equipment and accessories, museum objects, cases and equipment which are stored in the buildings.

(c) Arts and Industries Building (1881)

Necessary repairs to the roof of the Arts and Industries Building are urgently required. The flat seam covering of the roof over the four ranges and the areas surrounding the rotunda have deteriorated and numerous coatings applied through the years in an effort to stop the leaks have cracked, blistered, and loosened. Resultant leaks present a constant hazard to the valuable collections, exhibitions, offices, and storage areas.

Plan of work:

The increase will be used to correct the unsatisfactory conditions described above and will be distributed as follows:



Smithsonian institution storage facility \$ 00,00	
To repair and paint the exterior metal covering of the	
y storage and restoration shop buildings (\$30,000); install	
pings, fire hydrants, fire hose, and equipment to provide an	
fire-fighting system (\$30,000).	
Arts and Industries Building \$ 41,00)0
To repair the roof by removing the loosened and blistered	
roof covering.	
Reduction to appropriation \$-58,00)()
While the increases listed above total \$227,000, a net	
of \$169,000 is being requested for rehabilitation of	
s since projects amounting to \$58,000 in F.Y. 1961 were completed.	-
increase)0
2 2 3 8 9	
b. Repair roof areas envouseding	
C. Leplace domestice mater care	ĵ
	To repair and paint the exterior metal covering of the storage and restoration shop buildings (\$30,000); install pings, fire hydrants, fire hose, and equipment to provide an fire-fighting system (\$30,000). Arts and Industries Building \$41,000. To repair the roof by removing the loosened and blistered rings, replace metal flashings, and install a three-ply roof covering. Reduction to appropriation \$-58,000 while the increases listed above total \$227,000, a net of \$169,000 is being requested for rehabilitation of a since projects amounting to \$58,000 in F.Y. 1961 were completed. Increase \$169,000 in repair and representation of the storage o

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(4) An increase of \$80,000 to provide for moving and storing Museum materials to facilitate the reconstruction work and installation of air conditioning in the Natural History Building.

Need for increase:

The Congress appropriated funds for fiscal year 1961 for the rehabilitation and modernization of the Natural History Building and for construction of the east wing. Construction commenced early in January 1961 and by fiscal year 1962 substantial changes in the building will be underway and large scale moving operations will have to be undertaken. Offices and storage areas currently occupied in the Natural History Building must be vacated to permit access to them for reconstruction work and for installation of air conditioning ducts, plumbing, and telephone utility lines. Included in this moving program are: storage cases containing valuable and delicate specimens, many of which are irreplaceable; exhibition cases; office furniture; equipment; and supplies. Temporarily these materials and the staff concerned will have to be located elsewhere in the building or in storage space.

Plan of work:

The increase will be used to employ 13 laborers to assist in the large scale moving operations explained above and to rent space (\$40,000) to store Museum objects, furniture, equipment, and accessories during construction of the additions to the Natural History Building.



Carl Carl

(5) An increase of \$70,000 for within-grade promotions

The Classification Act of 1949, as amended, (5 U.S.C. 1121) provides that permanent employees compensated on a per annum basis shall be granted periodic step increases. Based on a position-by-position study, the apparent cost of within-grade promotions in fiscal year 1962 and the carry-over cost of prior year within-grade promotions are \$94,000. Giving effect to the anticipated turnover rate, it is estimated that this cost will be reduced by \$24,000. The latter amount is comprised of \$18,000 representing the cost of within-grades not granted or terminated because of turnover and \$6,000 denoting savings on separations at above minimum salaries. In arriving at the \$6,000 savings, allowance was made to provide for hiring at above the minimum rate.

1. Apparent cost.

2. Deduct

a. 20% turnover

b. Turnover & higher than love

of grade (20% of 1172 employees

f grade (20% of 1172 employees)

234 employees x 449.14 = 11499 + 2) 5749

2450"

3 True cost of Fy 1962 within - year primation, 69,5000

Social Security -- 2750

Social Security -- 2750

france -- 2800

Health isenefits -- 9500

* 68,650

(6) A net increase of \$86,000 primarily for personnel benefits and miscellaneous staff increases.

Need for increase:

- (a) With the establishment of 168 (net) new positions in fiscal year 1962, the Smithsonian Institution will require additional funds for its share of the cost of such personnel benefits as retirement, Social Security, insurance, and health for these new employees.
- (b) Miscellaneous staff increases will be required because of the additional workload in the National Collection of Fine Arts and the growth of certain programs in the Museum Service.

Preserving the world_famous collections, preparing exhibition catalogs and information releases, and planning the remodeling of the Civil Service Commission Building will increase the workload of the National Collection of Fine Arts.

The staff of the Museum Service must be increased because of the operation of recorded gallery tours and the growth of the central slide library and the Junior League Docent Program.

Plan of work:

The increase will be used as follows:

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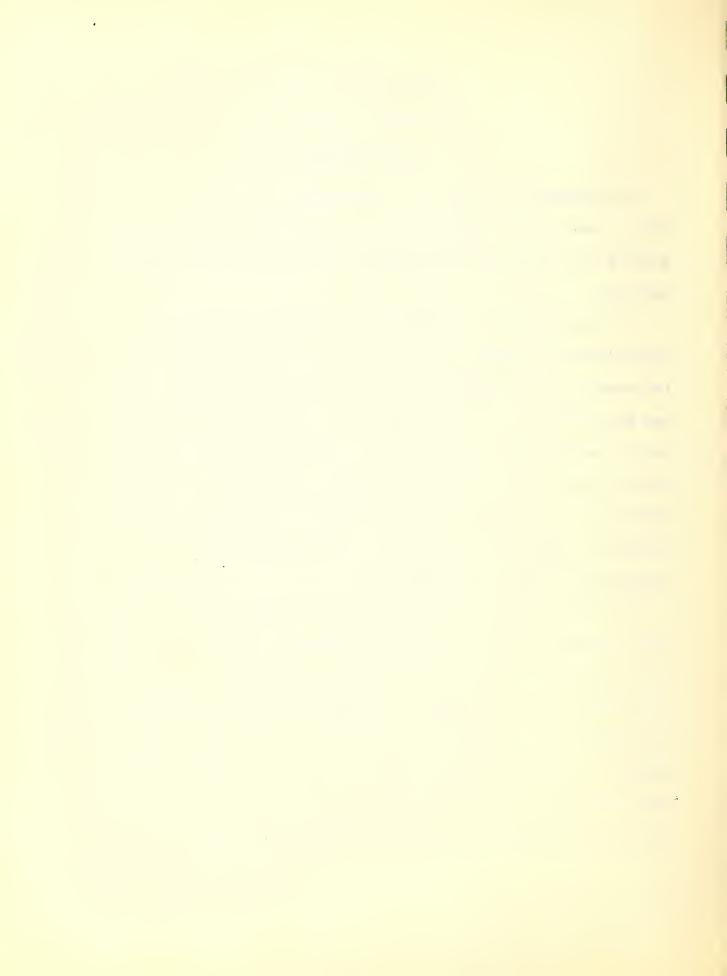
ESTIMATES FOR CONSTRUCTION

General Statement

The Smithsonian Institution is requesting funds for fiscal year 1962 to complete the construction of additions to the Natural History Building and for planning the remodeling of the Civil Service Commission Building.

In fiscal year 1961, \$13,500,000 was appropriated for the rehabilitation and modernization of the Natural History Building and the construction of an east wing. This work commenced in January 1961. In the Budget for fiscal year 1962, \$5,310,000 is requested in order to permit construction of the west wing and completion of the entire project. (It is anticipated that an amendment to the Budget will be submitted to the Congress, to reduce the amount of the request from \$5,310,000 to \$4,336,000 on the basis of the favorable bid subsequently received for the East Wing).

It is anticipated that the present Civil Service Commission building will be available for transfer to the Smithsonian Institution in fiscal year 1963 since a contract for the construction of a new building for the Commission has been awarded by the General Services Administration and construction is scheduled to be completed by March 1963. Therefore, \$400,000 is included in these estimates to provide funds for preparing plans and specifications for the necessary remodeling of the existing Civil Service Commission building for art gallery purposes.



The Act of September 6, 1958 authorized and directed the Smithsonian Institution to prepare plans and specifications for the construction of a National Air Museum. Preliminary technical studies have been completed and administrative planning of the functional design of the building continues. A request for funds for architectural plans and specifications will be submitted in a subsequent year.

In addition to the above projects, construction is continuing on the Museum of History and Technology on Constitution Avenue between 12th and 14th Streets, N. W.; completion and opening of the building are scheduled for 1962.

East Wing 9,96,000 West 8475 and 18,436,000 200,000

19616,000 18636 ove 974, ove reduction in dost

> 5,310,000 4,336,000

CONSTRUCTION OF ADDITIONS TO THE NATURAL HISTORY BUILDING JUSTIFICATION

The sum of \$5,310,000 is included in the Budget for the fiscal year 1962, to complete the Additions to the Natural History Building by constructing the authorized west wing. (It is anticipated that an amendment to the Budget will be submitted to the Congress to reduce the amount of the request from \$5,310,000 to \$4,336,000, on the basis of the favorable bid subsequently received for construction of the East Wing.)

The need for the completion of this critically important construction project for the Smithsonian Institution is based on detailed studies by the Public Buildings Service and the Smithsonian Institution's staff. These studies indicate that the most satisfactory means of providing and operating the additional facilities required by the Museum of Natural History is to erect the long-authorized wings, including such alterations and improvements as may be necessary to integrate the wings with the existing building. Congressional acceptance of this project was received with the provision of a major portion of the necessary funds in the fiscal year 1961.

The Natural History Building has become completely inadequate to provide for the efficient preservation of the great natural history collections and the effective conduct of the important and often unique scientific research in its laboratories. The collections and laboratories have become unbelievably overcrowded to the extent that many corridors and stair landings have been pressed into service to



provide space for the constantly increasing collections. Large areas of specially designed and badly needed exhibition space also have been converted, most reluctantly but of necessity, to laboratory and reference collections space; and staff members have been forced to work on the collections in attics, halls, stairwells, storerooms, and in extremely crowded quarters. Staff members, as well as visiting scientists who use the collections each day, frequently have to climb ladders to hazardous positions to reach the crowded and high-stacked reference collections.

The natural history collections in this building constitute the Nation's basic standards for purposes of scientific identification.

Every year, in order to facilitate fundamental and applied research, tens of thousands of items are submitted for identification from all over the United States and from numerous foreign lands. The preservation and utilization of these internationally famous and unrivaled collections are made extremely difficult and unnecessarily costly because of the crowded conditions. Most of the basic and world-famous research of the Smithsonian Institution in biology, geology, and anthropology must be conducted in this building where the reference collections supporting this research are preserved. On a typical working day as many as three hundred visiting scientists from universities and from government agencies crowd the available space for research because of the necessity to refer to these collections which are, for the most part, unduplicated elsewhere on this continent or in the whole world.

The Smithsonian Institution, in accepting the custody and in promising the safekeeping of an enormous quantity of irreplaceable



scientific materials, is responsible for the availability in one place of these reference collections without which anticipated scientific results in the future will never be possible. The 44 million items that comprise the natural history collections of the United States advance knowledge only in proportion to the extent the materials representing the biological and geological sciences are sorted, classified, described, named, and stored in accessible order. To accomplish this, additional space for the specialists in the respective subject matter fields and also for the adequate storage and arrangement of the collections is urgently needed.

Construction of the east wing and rehabilitation of the existing Natural History Building commenced in January 1961. Completion of the present contract is scheduled for March 1963. Approval of this request for funds will provide for construction of the west wing and completion of the entire project.



REMODELING OF CIVIL SERVICE COMMISSION BUILDING (FORMERLY KNOWN AS THE PATENT OFFICE BUILDING) FOR ART GALLERIES

JUSTIFICATION

The Congress by Act of March 28, 1958, directed the Administrator of General Services Administration to transfer the Civil Service Commission Building (formerly known as the Patent Office Building) to the Smithsonian Institution without reimbursement "for the use of certain art galleries of the Smithsonian Institution." The House Report on this public law stated: "An art museum building is urgently needed to display national collections of fine arts, comprising paintings, sculptures, bronzes, glass, porcelain, tapestry, furniture, jewelry, and other types of art. It would also be used to display portraits of eminent American men and women, and to exhibit the works of artists deserving of recognition."

The National Collection of Fine Arts and the National Portrait Gallery will occupy the building jointly.

The National Collection of Fine Arts is at present most inappropriately crowded into a hall in the Museum of Natural History. Many of its art. Objects cannot be displayed because of inadequate space. Since the establishment of the National Gallery of Art, the main objective of the National Collection of Fine Arts, as provided by Public Resolution 95, 75th Congress, approved May 17, 1938, is to foster the appreciation of both past and contemporary art and to encourage the development of contemporary art. The Smithsonian Traveling Exhibition Service, under the National Collection of Fine Arts, is well known for the art exhibitions it circulates to museums and galleries throughout the country. It is now inadequately housed in the Arts and Industries



building and needs space for temporary exhibition, preparation of exhibits, and shipping, as well as for more efficient offices.

The purpose of the National Portrait Gallery will be to exhibit portraits and sculptures of men and women who have made a significant contribution to the history, development, and culture of this country; and to provide means for biographical study of such individuals. Interest in the establishment of a National Portrait Gallery goes back 40 years. In 1921, the National Art Committee -- including J. Pierpont Morgan, Charles P. Taft, and former Smithsonian Secretary Charles D. Walcott -- sponsored the presentation of an exhibition in the Smithsonian Art Gallery of portraits of distinguished leaders of America and its allies during the first World War. This collection was circulated to other museums. The brochure describing the exhibition pointed out the need for additional gallery space not only for existing collections but "to make possible the acceptance in a large way of such additions as will undoubtedly be contributed by public spirited citizens" and further stated that the war portraits were regarded as the "nucleus of a National Portrait Gallery."

Dr. David E. Finley, Chairman of the Commission of Fine Arts, recently stated:

There is a great need for a National Portrait Gallery in Washington. Many portraits of important historical personages are now being held by the trustees of the National Gallery of Art for permanent display in a National Portrait Gallery.

The Smithsonian Institution also has a collection of nationally important portraits which cannot at the present time be adequately displayed. In addition, there are numbers of portraits of persons who should be represented in a National Portrait Gallery, now in the hands of private collectors, which might become available if a suitable building is provided.



The usefulness of a gallery of this kind has long been demonstrated by the National Portrait Gallery in London with its famous collection of portraits of persons who have contributed to the making of British history.

Since it is anticipated that the present Civil Service Commission building will be available for transfer to the Smithsonian Institution in fiscal year 1963, funds in the amount of \$400,000 are urgently required in fiscal year 1962 to develop plans and specifications for necessary remodeling of the building. Approval of this request will enable the Institution to have remodeling plans available at the time the building is transferred. It will also provide a sound basis for estimating the total cost of the conversion from office to art gallery purposes.

Preliminary Estimate of Planning Costs

	Drawings and specifications	\$275,000
	Surveys, site borings	30,000
	Office expense, Public Buildings Service	55,000
	Smithsonian Institution, incidental expenses	40,000
1	Total	\$400,000







SALARIES AND EXPENSES

Report of Employment by Activities

	F. Y. 1960 Actual	F. Y. 1961 Estimate	F. Y. 1962 Estimate	Increase or Decrease '62 over '61
Management	21	21	21	calo dari aus
United States National Museum	369	373	412	+ 39
Bureau of American Ethnology	9	9	11	. + 2
Astrophysical Observatory	28	32	45	+ 13
National Collection of Fine Arts	7	7	11	+ 4
National Air Museum	22	25	25	कर हेक इच
Canal Zone Biological Area	12	12	12	्रहत्य क्षेत्रं प्रका
International Exchange Service	11	12	12	gur dak dak
Buildings Management Service	340	343	440	+ -97 + 5 =
Other General Services	77	81	. 94	+ <u>13</u>
Average number of all employees	896	915	1,083	

Note: where is a some the sext section.

THE STREET STREET

SALARIES AND EXPENSES

Report of Obligations by Activities

	F. Y. 1960 Actual	F. Y. 1961 Estimate	F. Y. 1962 Estimate	Increase or Decrease '62 over '6
Management	\$ 156,000	\$ 163,000	\$ 165,000	\$+ 2,000
United States National Museum	3,645,000	3,801,000	3,865,000	+ 64,000
Bureau of American Ethnology	70,000	74,000	86,000	+ 12,000
Astrophysical Observatory	353,000	403,000	595,000	+ 192,000
National Collection of Fine Arts	62,000	63,000	84,000	+ 21,000
National Air Museum	197,000	199,000	201,000	+ 2,000
Canal Zone Biological Area	53,000	53,000	53,000	* ***
International Exchange Service	88,000	98,000		+ 1,000
Buildings Management Service	1,942,000	1,951,000		+ 720,000
Other General Services	1,144,000	1,291,000		/+ <u>165,000</u>
Total obligations	7,710,000	8,096,000	9,275,000	+1,179,000
Unobligated balance lapsing	8,000			1029
Appropriation or Estimate	7,718,000	>8,096,000	1/9,275,000	1,179,000

1/ Excludes \$18,000 supplemental requested for wage rate increase effective He teer " December 25, 1960.

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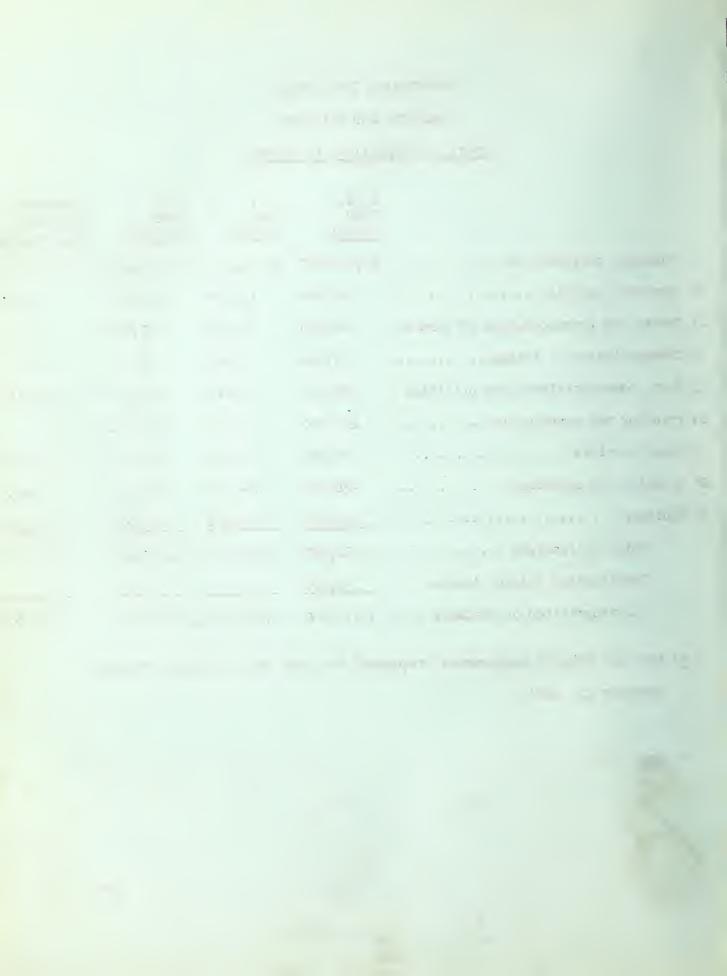
SALARIES AND EXPENSES

Report of Obligations by Objects

	F. Y. 1960 Actual	F. Y. 1961 Estimate	F. Y. 1962 Estimate	Increase or Decrease '62 over '61	
ll Personnel compensation	\$4,705,000	\$5,113,000	\$5,970,000		857,000
12 Personnel benefits	301,000	383,000	452,000	+	69,000
21 Travel and transportation of persons	62,000	89,000	89,000		-ware coad cons
22 Transportation of things	57,000	66,000	66,000		en en en
23 Rent, communications, and utilities .	302,000	315,000	435,000	+	120,000
24 Printing and reproduction	252,000	252,000	252,000		em cin cas.
25 Other services	846,000	798,000	957,000	+	159,000
26 Supplies and materials	288,000	304,000	364,000	+	60,000
31 Equipment	897,000	776,000	690,000		
Total obligations	7,710,000	8,096,000	9,275,000	f	,179,000
Unobligating balance lapsing	8,000			7	027 000
Appropriation or Estimate	7,718,000	8,096,000	1/9,275,000		,179,000

^{1/} Excludes \$18,000 supplemental requested for wage rate increase effective
December 25, 1960

* Chartery 3150, or in 1/47 years To



SMITHSONIAN INSTITUTION

SALARIES AND EXPENSES

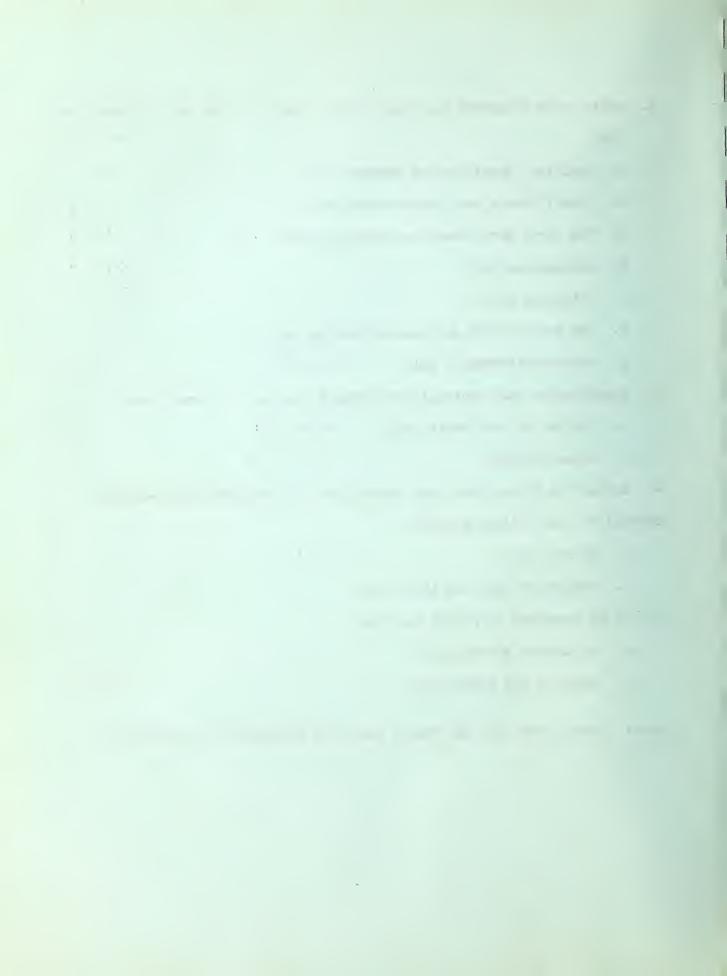
Renovation of Exhibits

1. Halls completed and opened to the public by the end of fiscal year

		01-			
1960:					
a.	First Ladies Hall	may 1955			
b.	The first American Indian Hall # 11	June 1955 march 1956 -> April 7,1957			
c.	North American Mammals Hall # 12 Sund part	> (april 7, 1957			
d.	Iatin American Archeology Hall # 23	april 1954			
e.	Bird Hall #13	march 1954			
f.	American Cultural History Hall - 24	Jan. 1957			
g.	Power Machinery Hall	March 1957			
h.	The second American Indian Hall	Dec 1957			
i.	Health Hall	nov. 1957			
j.	Military History Hall	June 1958			
k.	Printing Arts Hall	July 1958			
1.	Gems and Minerals Hall # 18	July 1958			
m.	Textiles Hall (1st Floor)	Jan 1959			
n.	Jade Room # 14	Feb. 1959			
0.	World of Mammals Hall 14 4 #15	new. 1959			
p.	Agriculture Hall	Jah. 1960			
q.	Fossil Fishes and Amphibians Hall # 3	June 1960			
r.	Textiles Hall (2nd Floor)	may 1960			

and the same of th b d - - -

2.	Hal	ls to be completed and opened to the public by the end of	fiscal year		
	196	ól:	pening date		
	a.	Medicine, Dentistry and Pharmacy Hall	aug. 1960		
	b.	Fossil Plants and Invertebrates Hall # 4	may 1961		
	c. The first North American Archeology Hall # 21 Jane 14-1 May 194				
	d.	Numismatics Hall	march 196		
	e.	Petroleum Hall	march 1961		
	f.	The second North American Archeology Hall # 22	april 196		
	g.	Prehistoric Mammals Hall facity 5 1961	Feb. 1961		
3.	Cor	Construction only partially completed by the end of fiscal year 1961:			
	a.	Peoples of the Pacific Hall #200 #3	June 28 is		
	b.	Ocean Life Hall Hack # 14			
4.	Dur	ing the fiscal year 1961 drawings will be finished and con	tracts		
awa	rded	for the following halls.			
	a.	Dinosaur Hall Hall Hall			
	b.	Peoples of Asia and Africa Hall Hall #7			
5.	То	be renovated in fiscal year 1962:			
	a.	Wertebrate Anatomy Hall			
	b.	Reptiles and Fishes Hall			
		euch			
Not	e:	Fiscal year 1961 and fiscal year 1962 obligations total \$4	55,000.		



SMITHSONIAN INSTITUTION

Work performed under grants and contracts from Federal agencies Grants

The Institution receives grants from funds available to Federal agencies.

Listed below are the amounts and the agencies from which the Smithsonian

received grants in fiscal year 1960 together with an estimate for fiscal

year 1961:

Federal agency	Actual F.Y. 1960	Estimate F.Y. 1961	
National Aeronautics and Space Administration	\$2 , 844,936	\$4,760,543	in the second
National Institutes of Health	302,815	170,000	
Department of Defense	225,000	100,000	
National Science Foundation	233,585	377,400	
Atomic Energy Commission	86,625	45,177	
Total grants	3,692,961	5,453,120	

These grants enable the Institution to participate in the Satellite Tracking Program; to operate the Science Information Exchange, a clearing house for research in life sciences and physical sciences, and to conduct research studies in such diverse subjects as the Economic System of the Herero; Plant Physiology; Marine Fauna, Tropical Pacific Area; Morphology and paleocology of permian brachiopods; Behavior of Tropical Birds; Phanerogams of Columbia; Systematics of Chilopoda and Diplopoda; South American Microlepedoptera; Early Tertiary Mammals of North America; Lichens of the Western Hemisphere; and Flora of Fiji. There follows a brief statement of the Smithsonian Institution's functions under the grant from the National Aeronautics and Space Administration.

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THE SATELLITE TRACKING PROGRAM OF THE SMITHSONIAN ASTROPHYSICAL OBSERVATORY

The Smithsonian Astrophysical Observatory assumed the responsibility for establishing and operating a program for optical tracking of artificial earth satellites, as a part of the United States participation in the International Geophysical Year. The most powerful equipment possible for the precise photographic observation and determination of satellite positions, the Baker-Nunn camera, was constructed, and twelve observing stations were set up throughout the world. Furthermore, to provide more data for observing objects before orbital calculations were underway, the volunteer Moonwatch Visual Observing Program was established as an international effort. The only international tracking system operating at the launching of the first satellite, The Smithsonian Satellite Tracking Program continued to operate successfully.

The National Aeronautics and Space Administration has supported this program since the end of the International Geophysical Year.

Four specific scientific goals were established at the beginning of the satellite tracking program and continue to represent its purpose:

- 1. To develop and gain experience in observational and computational methods for dealing with artifical satellites and space vehicles.
- 2. To determine atmospheric densities at very high altitudes and to establish the laws of density variations with altitude, latitude, longitude, daily factors, seasonal factors, and solar activity.



- 3. To determine the gravitational potential of the earth of its effect on the motions of satellites.
- 4. To determine geodetically the geometric shape of the earth and to tie together the networks of the various continents to within an order of magnitude better than previous methods made possible.

The twelve Baker-Nunn camera stations are in Florida, the Netherlands West Indies, Peru, Argentina, the Union of South Africa, Spain, Iran, India, Australia, Japan, Hawaii, and New Mexico. The associated 110 international volunteer visual Moonwatch stations in 22 countries supply additional observations and act as a surveillance system for lost satellites.

Accomplishments -- The range capability of the Baker-Nunn camera has made it possible to photograph Vanguard I, the six-inch "grapefruit" satellite, at a distance of 3000 miles, and the "paddle-wheel" satellite nearly 14,000 miles from the earth. Approximately 17,200 satellite passages have been photographed by the network as of September 30, 1960, and 17,000 recorded by Moonwatch. The current output is approximately 1200 useful photographs per month.

The data that have accumulated since the beginning of the program have already served to increase our knowledge of the earth and of the earth's upper atmosphere. In particular, these new facts are giving us a more detailed understanding of:

- 1. The effects on the earth and the ionosphere of solar ultraviolet light, cosmic and solar X-rays, and other particle radiations.
- 2. The physics of the upper atmosphere as it related to more accurate long and short-range weather forecasting.



- 3. The points in the upper atmosphere at which energy is either absorbed or radiated, and the problem of energy balance and dynamics of the upper atmosphere.
- 4. The disturbances in our atmosphere that result from solar flares and solar radiation.
- 5. The relation between conditions in the upper atmosphere and the weather at lower levels.
- 6. The variations of density and temperature at different levels of the upper atmosphere.
 - 7. The nature and cause of the Aurora.
- 8. The forces that produce the changes and fluctuations in the earth's magnetic field.
 - 9. The variations in composition and thickness of the earth's crust.
 - 10. The size and exact shape of the earth.
 - 11. The sizes and relative positions of land and water masses on the earth.

Contracts

The Smithsonian Institution also performs research for Federal agencies on reimbursable contracts. In fiscal year 1960 these contracts totalled \$341,851. This research was primarily in the fields of astrophysics, astronomy, and psychology.

The agencies for whom this work was performed and the amount of reimbursement, together with an estimate for fiscal year 1961 follows:

Federal agency	Actual F.Y. 1960	Estimate F.Y. 1961	
Department of Defense	\$281,451	\$340,505	
Atomic Energy Commission	50,000	55,000	
Veterans Administration	33,400	38,000	
Total reimbursable contracts	341,851	433,505	36

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